CANCER INFORMATION

DATE OF INITIAL DIAGNOSIS (NAACCR Item #390) (FORDS pgs. 89–90; SEER pgs. 61-64)

Definition
The date of initial diagnosis is the earliest date this primary cancer is diagnosed clinically or microscopically by a recognized medical practitioner, regardless of whether the diagnosis was made at the reporting facility or elsewhere.

Explanation
The date of initial diagnosis is essential in the analysis of staging and treatment of the cancer, for epidemiology purposes, and for outcomes analysis.

Coding Instructions

1. Date format is MMDDCCYY. The first and second digits are the month, the third and fourth digits are the day, the fifth and sixth digits are the century and the seventh and eighth digits are the year.

2. The initial diagnosis date may be from a clinical diagnosis, for example, when a radiologist views a chest x-ray and the diagnosis is lung carcinoma. If later confirmed by a pathology specimen, the diagnosis date remains the date of the initial clinical diagnosis.

3. The date of diagnosis based on a pathology report should be the date the specimen was taken, not the date the pathology report was read or created.

4. Refer to the *List of Ambiguous Terms* on page 28 for language that represents a diagnosis of cancer.

5. If a recognized medical practitioner states that, in retrospect, the patient had cancer at an earlier date, record the date of diagnosis as the earlier date. If later documentation shows the diagnosis was an earlier date, record the earlier date. Check with the TCR regional office for the appropriate procedure if this case has already been submitted to the TCR.

6. For autopsy-only and death-certificate only cases the date of initial diagnosis will be the date of death.

7. Use the *date of birth* as the *Date of Initial Diagnosis* for an in-utero diagnosis.

Example:
An ultrasound done to determine expected date of birth shows an un-born baby has a brain tumor. A resection after the baby is born shows malignant teratoma. Use the date of birth as the date of diagnosis.

8. Use the date therapy was started as the date of diagnosis if the patient receives first course of treatment before a definitive diagnosis.

9. Positive tumor markers alone are not diagnostic of cancer. Use the date of positive clinical, positive histologic, or positive cytologic confirmation as the date of diagnosis. Positive tumor markers alone are never used for case ascertainment.

10. Suspicious cytology alone is not diagnostic of cancer. Use the date of positive clinical, positive histologic, or positive cytologic confirmation as the date of diagnosis. Suspicious cytology alone is never used for case ascertainment.

Examples:

a. The patient has an excision of a benign fibrous histiocytoma in January 2008. Six months later, a wide re-excision was positive for malignant fibrous histiocytoma. The pathologist reviews the original slides and documents that the previous tumor (benign fibrous histiocytoma) was malignant. Code the diagnosis date as January 2008.

   Do not back date if there is no review of previous slides with a revised physician statement of diagnosis of cancer or reportable tumor.

b. The patient had a total hysterectomy and bilateral salpingo oophorectomy (BSO) in June 2008 with pathology diagnosis of papillary cystadenoma of the ovaries. In December 2008 the patient is diagnosed with widespread metastatic papillary cystadenocarcinoma. The slides from June 2008 are not reviewed and there is no physician statement saying the previous tumor was malignant. The date of initial diagnosis is December 2008.

In the absence of an exact date of initial diagnosis, record the best approximation. If the year is known and the month and day are not known, record 9's for the month and day and record the year of diagnosis, for example, 99992008. Document in the final diagnosis field "Date of DX Unknown" along with the primary site, histology and behavior information.

Note: *Every resource available at the reporting facility must be reviewed in order to determine the date of diagnosis.*

For vague dates, estimate the date of diagnosis for month and year. An approximate date is preferable to an unknown date of diagnosis. Refer to the table and examples on the next page.
Code the month and year of admission when there is no basis for estimation and document "Date of DX unknown" in the final diagnosis field. *This should be used as a last resort after exhausting all available resources.*

Example:
Patient admitted to your facility on April 26, 2008 with a recent diagnosis of cancer but the exact date of diagnosis is unknown. Code the date of diagnosis as 04992008 and document in the final diagnosis field "Date of DX Unknown."

Note: *Estimating both the month and year: Use whatever information is available to best estimate the month and year of diagnosis.*

DOCUMENTATION	DATE CODE/DESCRIPTION
Spring	Use April (04) for the month
Summer	Use July (07) for the month
Fall/Autumn	Use October (10) for the month
Winter	Determine if this means the beginning or the end of the year. Use December (12) or January (01) for the month as determined.
Early in Year	Use January (01) for the month
Middle of Year	Use July (07) for the month
Late in Year	Use December (12) for the month
Recently	Use the month and year of admission and unknown day (99) for the day. If patient was admitted during the first week of a month, use the previous month.
Several Months Ago	If the patient was not previously treated or if first course treatment started elsewhere was continued at the reporting facility, assume the case was first diagnosed three months before admission with day unknown.
A Couple of Years	Code to two years earlier
A Few Years	Code to three years earlier

Examples:

a. A patient was admitted to your facility on January 15, 2008. The History and Physical states the patient has prostate carcinoma diagnosed approximately two months ago. Record the date of diagnosis as 11992007.

b. A patient was admitted to your facility on September 10, 2007. The History and Physical states the patient has bone and brain metastasis from malignant melanoma diagnosed in the fall, four years ago. Record the date of diagnosis as 10992003.

c. On March 12, 2008, a mammogram reveals a mass in the upper outer quadrant of the patient's right breast. The radiologist's impression states: compatible with carcinoma. On March 20, 2008, the patient has an excisional breast biopsy that confirms infiltrating ductal carcinoma. Record the date of diagnosis as 03122008.

Note: Remember to check with the TCR health service regional office regarding the appropriate procedure to follow when there is updated information on an abstract already submitted to the TCR. **Do NOT resubmit the abstract**. These cases will result in duplicate records and require manual resolution.

MORPHOLOGY AND BEHAVIOR (NAACCR Item #522, #523) (FORDS pgs. 93–95; SEER pgs. 78–85) (ICD-O-3)

Description
Identifies the microscopic structure of cells and the behavior of the tumor being reported.

Explanation
The histological (morphologic) type helps to determine staging and treatment options. It also assists in determining the disease course and prognosis, and in identifying multiple primaries. The behavior code is used by pathologists to describe whether tissue samples are benign (0), borderline (1), in situ (2), or malignant (3).

Coding Instructions

Morphology

1. Record the morphology code using the Alphabetic Index (ICD-O-3 pages 105–218) and the Numerical Index (ICD-O-3 pgs. 69–104). Review both of these sections of the ICD-O-3 to ensure accurate coding.

Note: *For all cases diagnosed prior to January 01, 2001, the International Classification of Diseases for Oncology, 2nd Edition (IDC-0-2)* ***must*** *be used.*

2. Follow the coding rules outlined on pages 20–40 of ICD-O-3.

3. The term [obs] in ICD-O-3 indicates a diagnosis for which a better diagnostic term(s) is available, but which may still be used to code the cancer in certain circumstances. Obsolete terms are retained in ICD-O-3 for historical reference.

4. Adequate text documentation must be provided to support coding. Auto coding of the ICD-O-3 code description is not considered adequate text documentation.

Histology can be coded only after the determination of single vs. multiple primaries has been made. Refer to Multiple Primary and Histology (MP/H) rules in Appendix O of this manual to determine the number of primaries. For Hematopoietic diseases refer to Appendix E.

Note: The Benign Brain and CNS Rules were released in October 2007, and are now located in Appendix O.

Note: For cases diagnosed prior to January 1, 2007 refer to the *TCR Handbook, Revised 2007.*

Information about the 2007 Histology Coding Rules

1. The 2007 histology coding rules replace all previous rules.

2. The rules are effective for cases diagnosed January 1, 2007 and after. Do not use these rules to abstract cases diagnosed prior to January 1, 2007.

3. The histology coding rules, found in Appendix O, are in text format. The rules are available in flowchart and matrix format on the SEER website: http://seer.cancer.gov/tools/mphrules/ Appendix O can be found on the TCR website: http://www.dshs.state.tx.us/tcr/reporting.shtm#HB

4. Rules are in hierarchical order within each section (Single Tumor and Multiple Tumors Abstracted as a Single Primary).

Note: *Do not use these rules to determine case reportability, tumor grade, or behavior.*

How to Use the Rules

1. Code the histology at diagnosis. Use all information gathered through completion of surgery(ies) in first course of treatment.

2. Do not revise or update the histology code based on subsequent recurrence(s).

3. Read the General Instructions in Appendix O.

4. Read the site-specific Equivalent Terms and Definitions.

5. Use these rules to make a decision on coding the histology for all reportable solid malignant tumors.

6. Use the multiple primary rules to determine whether the patient has a single or multiple primaries **before** coding the histology.

7. Code the histology for each primary in a separate abstract.

8. Use the **site-specific rules** for the following primary sites:
   - Brain, malignant (intracranial and CNS)
   - Breast
   - Colon
   - Head and neck
   - Kidney
   - Lung
   - Malignant melanoma of the skin
   - Renal pelvis, ureter, bladder, and other urinary
   - Benign brain and CNS

9. Use the **Other Sites** rules for all solid malignant tumors that occur in primary sites not included in the site-specific rules.

10. Determine whether the patient has a single tumor or multiple tumors that will be abstracted as a single primary.

    a. Do not count metastatic tumors.

    b. When the tumor is described as multifocal or multicentric and the number of tumors is not stated, use the Single Tumor module.

    c. When there is a tumor or tumors with separate foci of tumor, do not count the foci.

    d. Only count the tumors that will be used to prepare that abstract. For example, when there are two tumors that will be abstracted as multiple primaries, you would use the Single Tumor modules to determine the histology code for each of the abstracts.

11. Each section (Single Tumor and Multiple Tumors Abstracted as a Single Primary) is an independent, complete set of coding rules. For example, if the patient has multiple tumors that will be abstracted as a single primary, start with the first rule under the heading Multiple Tumors Abstracted as a Single Primary. Do not use any of the rules under the heading Single Tumor in this case.

12. Use the first rule that applies and **STOP**.

Coding Instructions for Hematopoietic Primaries

Note: *The new 2007 Multiple Primary and Histology Rules (Appendix O) do not apply to hematopoietic primaries (lymphoma and leukemia) of any site.*

1. Refer to Appendix E to determine the number of primaries for Hematopoietic diseases. If a physician clearly states that a Hematopoietic diagnosis is a new primary, use that information. Otherwise use the SEER table "Definitions of Single and Subsequent Primaries for Hematologic Malignancies" in Appendix E.

2. If there is no tumor specimen, code the histology described by the medical practitioner.

3. Use the histology stated in the final diagnosis from the pathology report. Use the pathology from the procedure that resected the majority of the primary tumor. If a more specific histology type is definitively described in the microscopic portion of the pathology report or the comment, code the more specific diagnosis.

4. Lymphoma may be classified by the **WHO** Classification, **REAL** system, **Rappaport,** or **Working Formulation.** The WHO Classification is preferred. See page 13 in the ICD-O-3 for a discussion of hematologic malignancies.

5. Code the diagnosis of chronic lymphocytic leukemia (9823/3) and/or small lymphocytic lymphoma (9670/3) to SLL if there is lymph node involvement or deposits of lymphoma/leukemia in organs or

other tissue. Code the histology to CLL if there are no physical manifestations of the disease other than a positive blood study or positive bone marrow.

Example:
Biopsy of left scalene lymph node shows a diagnosis of chronic lymphocytic leukemia/small lymphocytic lymphoma. The patient has a bone marrow biopsy 2 days later with a diagnosis of chronic lymphocytic leukemia. Code the primary site to lymph nodes and the histology to 9670/3, small lymphocytic lymphoma. Any mention of lymph nodes constitutes involvement for lymphomas and the case must be coded to 9670/3.

Histology Coding Rules for Hematopoietic Primaries

The rules are in hierarchical order. Rule 1 has the highest priority. Use the rules in priority order. Use the first rule that applies to the case. (Do not apply any additional rules.)

1. Code the histology if only one type is mentioned in the pathology report.

2. Code the **more specific term** when one of the terms is "NOS" and the other is a more specific description of the same histology.

3. Code the **numerically higher** ICD-O-3 code. This is the rule with the lowest priority and should be used infrequently.

Behavior Codes:

0 Benign (Reportable for intracranial and CNS sites only)
1 Uncertain whether benign or malignant, borderline malignancy, low malignant potential, and uncertain malignant potential (Reportable for intracranial and CNS sites only)
2 Carcinoma in situ; intraepithelial; noninfiltrating; noninvasive
3 Malignant, primary and/or metastatic site (invasive)

Note: *Cases reported to the TCR cannot have a metastatic (/6) behavior code. If the only pathology specimen is from a metastatic site, code the appropriate histology code and the malignant behavior code /3. The primary site and its metastatic site(s) have the same basic histology.*

Example:
A patient is diagnosed with metastatic brain tumors and a fine needle aspiration biopsy shows that the tumor is metastatic small cell carcinoma (8041/6). The pathology report indicates that the tumor originated in the lung. Code the primary site as lung and the morphology as small cell carcinoma (8041/3)

Behavior Coding Instructions

1. Behavior codes benign /0 and borderline /1 are reportable for intracranial and CNS sites only.

These tumors have always been reportable to the TCR. (C700, C701, C709, C710-C719, C720-C725, C728, C729, C751-C753)

2. Clinical evidence alone cannot identify the behavior as in situ; the code must be based on pathologic examination and documentation.

3. Code the behavior as invasive /3 if any portion of the primary tumor is invasive no matter how limited; such as microinvasion.

Example:
Pathology from mastectomy specimen: Large mass composed of intraductal carcinoma with a single focus of invasion. Code the behavior as infiltrating duct carcinoma (8500/3).

4. Code the behavior as in situ /2 if the pathology report describes the histology as in situ/2 and the ICD-O-3 histology is listed only with an invasive /3 behavior code.

5. Code the behavior as invasive /3 if the pathology report describes the histology as invasive /3 and the ICD-O-3 histology code is listed only with an in situ /2 behavior.

6. Certain histologies will never have in situ behaviors (8000–8005, 8020, 8021, 8331, 8332, 8800–9055, 9062, 9082, 9083, 9110–9493, 9501–9989).

7. If more than one behavior is reported, select the morphology code with the higher behavior code (the invasive tumor).

8. Refer to the following table.

BEHAVIOR CODE	FIFTH DIGIT TERM	EXAMPLE
2	In situ and/or carcinoma in situ	Adenocarcinoma in an adenomatous polyp with no invasion of stalk
		Bowen disease (not reportable for C440–C449)
		Clark's Level I for melanoma (limited to epithelium)
		Comedocarcinoma, noninfiltrating (C50_)
2	Terms synonymous with in situ	Confined to epithelium
		AIN III (C211)
		Behavior code /2
		Hutchinson's melanotic freckle, NOS (C44_)
		Intracystic, non-infiltrating
		Intraductal
		Intraepidermal, NOS
		Intraepithelial, NOS
		Involvement up to, but not including the basement membrane

BEHAVIOR CODE	FIFTH DIGIT TERM	EXAMPLE
2 cont'd	Terms synonymous with in situ	Lentigo maligna (C44_)
		Lobular, noninfiltrating(C50_)
		Noninfiltrating
		Noninvasive
		No stromal invasion/involvement
		Papillary, non-infiltrating or intraductal
		Precancerous melanosis (C44_) Preinvasive
		Queyrat's erythroplasia (C60)
		Stage 0 (except Paget's disease (8540/3) of breast and colon or rectal tumors confined to the lamina propria)
		VAIN III (C529)
		VIN III (C51_)
3	Invasive	Invasive or microinvasive

PRIMARY SITE (NAACCR Item #400) (FORDS pg. 91; SEER pgs. 69-72)

Description
Identifies the primary site of the cancer.

Explanation
The primary site helps to determine stage and treatment options and shapes disease course and prognosis.

Refer to the Multiple Primary/Histology (MP/H) rules in Appendix O to determine the number of primaries. Use all of the available information to code the site.

Note: *The Benign Brain and CNS Rules were released in October 2007 and are now located in Appendix O.*

Adequate text documentation must be provided to support coding. Auto coding of the ICD-O-3 code description is not considered adequate text documentation. In general, when a primary site is preceded by carcinoma of…, or malignancy of…, code to that primary site.

See the *Coding Guidelines for Topography and Morphology* in the introduction of the ***ICD-O-3*** for additional details. Primary site codes may be found in the *ICD-O-3 Topography, Numerical List Section* (*ICD-O-3*, page 43) and in the *Alphabetic Index* (*ICD-O-3*, page 105). The topography code consists of an initial character (the letter 'C') followed by two numeric digits, a decimal point, and one additional numeric digit. The decimal point is not entered as part of the code.

Example:
The pathology report says the primary site is the cardia of the stomach. The code (C160) is

found in the *Alphabetic Index* under either "stomach" or "cardia." Enter the code as (C160); do not record the decimal point.

Note: *The exact location of the primary tumor is not always stated in the pathology report or discharge diagnosis. It is necessary to review the entire medical record in order to obtain the most precise description of the primary site.*

Example:
The pathology report states right breast resection specimen. The discharge diagnosis states carcinoma in the right breast. The History and Physical states examination of the right breast reveals a mass in the upper outer quadrant. **Code to the more detailed description from the History and Physical, upper outer quadrant of the right breast (C504).**

Coding Instructions

1. Code the site in which the primary tumor originated, even if it extends into an adjacent "subsite."

Examples:
a. Final diagnosis is adenocarcinoma of the upper lobe of the right lung. *Code the topography to lung, upper lobe (C341).*

b. Pathology report shows adenocarcinoma arising in an ectopic patch of endometriosis on the sigmoid colon. *Code primary site to sigmoid colon (C187) where the cancer originated.*

c. Patient has a right branchial cleft cyst; the pathology report identifies an adenocarcinoma arising in an ectopic focus of thyroid tissue within the branchial cleft cyst. Thyroidectomy pathology is negative. *Code primary site to branchial cleft (C104).*

d. The patient had a total hysterectomy with a bilateral salpingo-oophorectomy ten years ago for non-cancer reasons. She now has widespread cystadenocarcinoma in the peritoneum. *Code the primary site to peritoneum, NOS (C482).* (The chart may or may not state that the patient has extra-ovarian or primary peritoneal carcinoma).

e. The patient has a 4 cm tumor in the right breast. The tumor originated in the upper inner quadrant and extends into the lower inner quadrant. *Code primary site to upper inner quadrant of breast (C502).*

2. Code the last digit of the primary site code to "8" when a single tumor overlaps an adjacent subsite(s) of an organ and the point of origin cannot be determined.

Example:
The patient has a 5 cm tumor overlapping the base of tongue and anterior 2/3 of tongue. Code the primary site to C028 (overlapping lesion of tongue).

Note: *For lymphomas, if multiple lymph node chains are involved and the involved chains are in*

different lymph node regions, code C778 (lymph nodes of multiple regions).

3. Code the last digit of the primary site code to 9 for single primaries, when **multiple tumors arise in different subsites** of the same anatomic site and the point of origin cannot be determined. For cases **diagnosed prior to 2007**, refer to the TCR Cancer Reporting Handbook, Revised 2007.

Examples:
a. During a TURB, the physician describes multiple papillary tumors in the bladder neck (C675) and the lateral wall of the bladder (C672). *Code the primary site as bladder, NOS (C679).*

b. Patient has an infiltrating duct tumor in the upper outer quadrant (C504) of the right breast and another infiltrating duct carcinoma in the lower inner (C503) quadrant of the right breast. *Code the primary site as breast, NOS (C509).*

4. Some histology/behavior terms in *ICD-O-3* have **a related site code** in parenthesis; e.g., hepatoma (C220).

Note: *Code the site as documented in the medical record and ignore the suggested ICD-O-3 code when a primary site is specified in the medical record.*

Example:
The pathology report says "infiltrating duct carcinoma of the head of the pancreas." The listing in *ICD-O-3* is infiltrating duct carcinoma 8500/3 (C50). Code the primary site to head of pancreas, NOT to breast as suggested by the *ICD-O-3*.

Note: *Use the site code suggested by ICD-O-3 when the primary site is the same as the site code suggested or the primary site is unknown.*

Examples:
a. The biopsy is positive for hepatoma, but there is no information available about the primary site. *Code the primary site to liver (C220) as suggested by ICD-O-3.*

b. The patient has an excision of the right axillary nodes which reveals metastatic infiltrating duct carcinoma. The right breast is negative. The *ICD-O-3* shows duct carcinoma (8500) with a suggested site of breast (C50_). *Code the primary site as breast, NOS (C509).*

5. Code the primary site, not the metastatic site. If a tumor is metastatic and the primary site is unknown, code the primary site as unknown (C809).

6. When the medical record does **not** contain **enough information** to assign a primary site:

   a. Consult a physician advisor to assign the site code.

   b. Use the NOS category for the organ system or the Ill Defined Sites (C760–C768) if the

physician advisor cannot identify a primary site.

c. Code Unknown Primary Site (C809) if there is not enough information to assign an NOS or Ill-Defined Site Category.

Common Metastatic Sites

If the final diagnosis reflects carcinoma of one of the common metastatic sites listed below, carefully review documentation in the medical record to identify the actual primary site.

- Bone
- CNS Sites (brain, spinal cord, meninges)
- Liver
- Lymph Nodes (excluding lymphoma)
- Pericardium (excluding mesothelioma)
- Pleura (excluding mesothelioma)
- Peritoneum
- Retroperitoneum

Guidelines for the Four Character Site Codes

According to ICD-O-3, each of the following four-character site codes is a separate primary:

- colon (C180–C189)
- rectum, anus, and anal canal (C199, C209, C210–C218)
- bone (C400–C419)
- connective tissue (C490–C499)
- peripheral nerves (C470–C479)
- melanoma of the skin (C440–C449)

Example:
Separate tumors in the cecum (C180) and ascending colon (C182) would be considered two separate primaries.

Leukemia Coding Instructions

1. Code leukemia primaries to bone marrow (C421); blood cells originate in the bone marrow.

2. Malignant histiocytosis/Systemic histiocytosis is coded to bone marrow (C421).

Lymphoma

Refer to *Determining Multiple Primaries for Lymphatic and Hematopoietic Diseases (Appendix E)* for further instructions.

Definitions:

Nodal lymphoma: A lymphoma originating in lymph nodes.

Extranodal lymphoma: Lymphoma originating in tissue or organ other than lymph nodes. Lymphatic system organs may be extranodal, for example, spleen is a lymphatic system organ and is also extranodal.

Extralymphatic: Originating in tissue or an organ that is not a part of the lymphatic system, for example, lymphoma of the stomach or colon.

Lymphatic system: An umbrella term that includes all lymphoid tissues: lymph nodes, spleen, thymus, tonsils, Waldeyer's ring, and Peyer's patches of the small intestine.

Lymphoma Coding Instructions

1. When a single lymph node chain is involved, code that chain as the primary site.

2. When multiple lymph node chains are involved at the time of diagnosis, do not simply code the lymph node chain that was biopsied.

    a. If it is possible to determine where the disease originated, code the primary site to that lymph node chain.

    b. If multiple lymph node chains are involved and all involved chains are located in the same ICD-O-3 primary site code, code the primary site to lymph nodes of the specified nodal region (C77_).

    c. If multiple lymph node chains are involved and the involved chains are in different lymph node regions, code C778 (lymph nodes of multiple regions).

3. When the lymphoma is **extranodal** and is:

    a. Confined to the organ of origin, code the organ of origin.

Example:
Pathology from a stomach resection shows lymphoma. No other pathologic or clinical disease is identified. *Code the primary site as stomach, NOS (C16.9). Use the surgery codes for stomach (C16.9) and use the Lymphoma CS schema.*

    b. Present in an **extranodal organ/site and** in that organ/site's **regional lymph nodes** code the extranodal organ/site as the primary site.

Lymphomas that are primary in an extranodal organ/site may metastasize to that organ/site's regional lymph nodes. In rare cases a lymphoma may spread from the lymph node to an extranodal site or

extralymphatic organ by direct extension.

Example:
Lymphoma is present in the lung and hilar lymph nodes. *Code the primary site to lung (C34.9), use the surgery codes for lung (C34.9) and use the Lymphoma CS schema to stage.*

c. Present in **extranodal organ(s)/site and non-regional lymph nodes**, consult the physician to determine the primary site. If a site cannot be determined, code primary site to lymph node, NOS (C779). This situation will be very rare.

Note: Approximately 25% of lymphomas originate in extra-nodal sites such as the stomach, intestine, or breast. ***A lymphoma primary originating in an organ or extra-nodal site should be coded to the organ or extra-nodal site and the surgery codes for that site should be used.*** *The code for the primary site, in some cases, may not be the biopsy site.* ***Always use the Lymphoma CS schema even if the lymphoma did not originate in the lymph nodes.*** *If a specific lymph node is the primary site, code accordingly.*

4. If the primary site is unknown or not given:

a. Code retroperitoneal lymph nodes if described as retroperitoneal mass (C772)

b. Code inguinal lymph nodes if described as inguinal mass (C774)

c. If the primary site is unknown code lymph nodes, NOS (C779)

EXCEPTION: *Code unknown primary site (C809) only when there is no evidence of lymphoma in lymph nodes and/or the medical record documents that the physician suspects that it is an extranodal lymphoma. This situation will be very rare.*

Esophagus Coding Instructions:

There are two systems that divide the esophagus into sub-sites. The first system divides the esophagus into the upper third, middle third, and lower third. The second system describes the sub-sites as the cervical esophagus, the thoracic esophagus and the abdominal esophagus. The sub-sites for these two different systems are not identical. Assign the ICD-O-3 topography code that describes the primary site documented in the medical record. See the *SEER Self Instructional Manual for Tumor Registrars, Book 4* for illustrated descriptions of each system.

Kaposi Sarcoma Coding Instructions:

Kaposi sarcoma is a rare condition. When not AIDS-related, it usually presents as localized disease with an easily recognized primary site. AIDS-related Kaposi sarcoma usually presents as a disseminated disease with involvement of **mucosal surfaces, visceral surfaces of organs, and skin**. It is important to review consecutive records carefully to determine the extent of involvement at diagnosis. Review of a single record may reveal only the site being treated during that admission.

1. Code Kaposi Sarcoma to the **site in which it arises**.

2. If the Kaposi Sarcoma is present in the **skin and another site** simultaneously, code to the specified skin site, (C44_).

3. If the **primary site is unknown** or cannot be determined, code **skin, NOS (C449).**

Sarcoma Coding Instructions:

The majority of sarcomas arise in mesenchymal or connective tissues that are located in the musculoskeletal system. The musculoskeletal system includes the fat, muscles, blood vessels, deep skin tissues, nerves, bones and cartilage. The default code for sarcomas of unknown primary site is **C499, connective, subcutaneous and other soft tissues, NOS,** rather than C809.

Sarcomas may also arise in the walls of hollow organs and in the viscera covering an organ. Code the primary site to the organ of origin.

Example:
The pathology identifies a leiomyosarcoma of the uterus. Code the site to uterus, NOS (C559).

Additional Guidelines for Coding Primary Site:

A subareolar/retroareolar carcinoma is coded to the central portion of the breast (C501), which indicates that the tumor arose in the breast tissue beneath the nipple, not the nipple itself.

Melanoma, NOS is coded to skin, NOS (C449).

Mycosis Fungoides is coded to skin (C44_).

Intestinal type adenocarcinoma (8144) is a gastric histology term and is not listed in the WHO Histological Classification of Tumors of the Colon and Rectum. This code should not be used for colon and rectum primaries.

GRADE OF TUMOR (NAACCR Item #440) (FORDS pg. 96–97; SEER pgs. 86–89)

Definition
Describes how much or how little the tumor cells resemble the parent tumor (organ of origin). Well differentiated (Grade 1) is the most like normal tissue, and undifferentiated (Grade 4) is the least like normal tissue. This data item is useful for determining prognosis.

Explanation
The more undifferentiated the tumor, the greater the incidence of metastasis and the more rapid the

clinical course. The terms "grade" and "differentiation" are used synonymously.

***Note**: Terms such as "anaplastic", "well differentiated", and "undifferentiated" are sometimes essential parts of morphologic terms for neoplasms in ICD-O-3 (as well as the phenotype [T-cell and B-cell] for lymphomas and leukemias). These terms must be reported with the appropriate grade code.*

Examples:

8020/3**4**	Carcinoma, undifferentiated
8021/3**4**	Carcinoma, anaplastic
8331/3**1**	Follicular adenocarcinoma, well differentiated
8332/3**1**	Follicular carcinoma, well differentiated
8332/3**2**	Follicular adenocarcinoma, moderately differentiated
8332/3**2**	Follicular carcinoma, moderately differentiated
8585/3**1**	Thymic carcinoma, well differentiated
8631/3**3**	Sertoli-Leydig cell tumor, poorly differentiated
8634/3**3**	Sertoli-Leydig cell tumor with heterologous elements, poorly differentiated
8805/3**4**	Sarcoma, undifferentiated
8851/3**1**	Liposarcoma, NOS, well differentiated
9062/3**4**	Seminoma, anaplastic
9082/3**4**	Malignant teratoma, undifferentiated
9082/3**4**	Malignant teratoma, anaplastic
9083/3**2**	Malignant teratoma, intermediate type
9187/3**1**	Intraosseous osteosarcoma, well differentiated
9362/3**2**	Pineal parenchymal tumor, intermediate differentiation
9382/3**4**	Oligoastrocytoma, anaplastic
9390/3**4**	Choroid plexus papilloma, anaplastic (synonym of malignant)
9392/3**4**	Ependymoma, anaplastic
9401/3**4**	Astrocytoma, anaplastic
9451/3**4**	Oligodendroglioma, anaplastic
9505/3**4**	Ganglioglioma, anaplastic
9511/3**1**	Retinoblastoma, differentiated type
9512/3**4**	Retinoblastoma, undifferentiated
9530/3**4**	Meningioma, anaplastic
9591/3**3**	Diffuse lymphocytic lymphoma, poorly differentiated (obs)
9591/3**4**	Non-Burkitt lymphoma, anaplastic (***note*****:** *phenotype (B-cell) takes precedence over differentiation)*
9591/3**6**	Malignant B-cell lymphoma
9670/3**6**	Malignant lymphoma, small B lymphocytic
9670/3**1**	Diffuse lymphocytic lymphoma, well differentiated
9679/3**6**	Mediastinal large B-cell lymphoma
9680/3**6**	Large B-cell lymphoma, anaplastic (***note:*** *phenotype (B-cell) takes precedence over differentiation)*
9687/3**4**	Burkitt type lymphoma, undifferentiated (obs)

9689/3**6** Splenic marginal zone B-cell lymphoma
9680/3**6** Large B-cell lymphoma
9699/3**6** Marginal zone B-cell lymphoma, NOS
9702/3**5** Mature T-cell lymphomas, NOS
9714/3**7** Large cell lymphoma, T cell and null cell type, anaplastic (***note:*** *a combination of phenotypes is coded to higher codes and takes precedence over differentiation)*
9823/3**6** Chronic lymphocytic leukemia, B-cell type
9827/3**5** Adult T-cell leukemia/lymphoma
9714/3**7** Large cell lymphoma, T cell and null cell type
9836/3**6** Precursor B-cell lymphoblastic leukemia

Coding Instructions

1. Code grade/differentiation according to the rules in the *ICD-O-3*, (pages 30-32, 67).

2. For sites other than breast, prostate and kidney, code the tumor grade using the following priority order: 1) terminology; 2) histologic grade; 3) nuclear grade.

3. If grade is not stated in the final pathology diagnosis, use the information in the microscopic section, addendum, or comment to code grade.

4. If more than one grade is recorded for a single tumor, code the highest grade, even if it is a focus.

Example:
Pathology report reads: Grade II adenocarcinoma with a focus of undifferentiated adenocarcinoma. Code the tumor grade as grade 4.

5. Code the grade from the **primary tumor** only, **never from a metastatic site or a recurrence.**

6. Code the grade for all **unknown primaries** to 9 (unknown grade) unless grade is explicit by histology, anaplastic carcinoma (grade = 9)

7. Code the grade of the invasive component when the tumor has **both in-situ** and **invasive** portions. If the **invasive** component **grade** is **unknown,** code the grade as 9 (unknown).

8. Code the information from the **consult** if the specimen is sent to a specialty pathology department for a consult.

9. If there are **multiple pathology consults,** ask the pathologist or physician advisor to determine which information should be used.

10. Do **not code** the grade assigned to **dysplasia**; for example high grade dysplasia (adenocarcinoma in situ) would be coded to 9 (unknown grade).

11. FIGO (International Federation of Obstetrics and Gynecology) grades are not coded. For a diagnosis that includes a commonly used differentiation term with a FIGO grade, such as moderately differentiated FIGO grade II, disregard the FIGO grade and code according to the term moderately differentiated.

12. If the grade is not stated in a biopsy report, the grade from surgical resection after neoadjuvant treatment should be recorded, if the surgical resection is part of the first course of treatment.

Coding Grade for Cases without Pathology or Cytology Confirmation

Code the grade of tumor stated on a Magnetic Resonance Imaging (MRI) or Positron Emission Tomography (PET) report if there is no tissue diagnosis (pathology or cytology report).

In situ Tumors

In situ tumors are not usually graded. Code the grade if it is specified for an in situ lesion unless there is an invasive component. Do not code the in situ grade if the tumor has both in situ and invasive components.

Codes

CODE	GRADE	DESCRIPTION
1	Grade I	Well differentiated; differentiated, NOS
2	Grade II	Moderately differentiated, moderately well differentiated, intermediate differentiation, partially well differentiated, partially differentiated, low grade NOS
3	Grade III	Poorly differentiated, dedifferentiated, moderately undifferentiated, relatively undifferentiated, slightly undifferentiated, medium grade NOS
4	Grade IV	Undifferentiated; anaplastic, high grade NOS
CELL INDICATOR FOR LEUKEMIAS AND LYMPHOMAS		
5		T-cell; T-precursor
6		B-cell; pre-B; B-precursor
7		Null cell; non T-non- B
8		NK (natural killer) cell
FOR USE IN ALL HISTOLOGIES		
9		Grade/differentiation not determined, not stated, not applicable; cell type not determined, not stated, not applicable

Terminology Conversion Table

DESCRIPTION	GRADE	ICD-O-3 MORPHOLOGY 6TH DIGIT CODE
Differentiated, NOS	I	1
Well differentiated	I	1
Fairly well differentiated	II	2
Intermediate differentiation	II	2
Low grade	I–II	2
Mid differentiated	II	2
Moderately differentiated	II	2
Moderately well differentiated	II	2
Partially differentiated	II	2
Partially well differentiated	I–II	2
Relatively or generally well differentiated	II	2
Medium grade, intermediate grade	II–III	3
Moderately poorly differentiated	III	3
Moderately undifferentiated	III	3
Poorly differentiated	III	3
Relatively poorly differentiated	III	3
Relatively undifferentiated	III	3
Slightly differentiated	III	3
Dedifferentiated	III	3
High grade	III–IV	4
Undifferentiated, anaplastic, not differentiated	IV	4
Non-high grade		9

Two-Grade System

Some cancers are graded using a two-grade system, for example, colon cancer. If the grade is listed as 1/2 or as low grade, assign code 2. If the grade is listed as 2/2 or as high grade, assign code 4.

Two-Grade Conversion Table

DIFFERENTIATION/ DESCRIPTION	GRADE	ICD-O-3 MORPHOLOGY 6TH DIGIT CODE
Low grade	1/2, I/II	2
High grade	2/2, II/II	4

Three-Grade System

There are several sites for which a three-grade system is used, such as peritoneum, endometrium, fallopian tube, prostate, bladder and soft tissue sarcoma. The patterns of cell growth are measured on a scale of 1, 2, and 3 (also referred to as low, medium, and high grade). This system measures the proportion of cancer cells that are growing and making new cells and how closely they resemble the cells of the host tissue. Thus, it is similar to a four-grade system, but simply divides the spectrum into 3 rather than 4 categories (see *Three-Grade Conversion Table* below). The expected outcome is more favorable for lower grades.

If a grade is written as 2/3 that means this is a grade 2 of a three-grade system. Do not simply code the numerator. Use the following table to convert the grade to SEER codes:

Three-Grade Conversion Table

DIFFERENTIATION / DESCRIPTION	GRADE	ICD-O-3 MORPHOLOGY 6TH DIGIT CODE
Low grade	1/3, I/III	2
Intermediate grade	2/3, II/III	3
High grade	3/3, III/III	4

NOTE: *Do not use the Three-Grade Conversion Table for breast primaries.*

Breast Coding Instructions

Code grade in the following priority order:

1. Bloom-Richardson scores 3–9 converted to grade (see following table)
2. Bloom Richardson grade (low, intermediate, high)
3. Nuclear grade only
4. Terminology: Differentiation (well differentiated, moderately differentiated, etc.)
5. Histologic grade: Grade 1/I/i, grade 2/II/ii, grade 3/III/iii, grade 4/IV/iv

Bloom-Richardson (BR)

1. **BR** may **also** be **called**: modified Bloom-Richardson, Scarff-Bloom-Richardson, SBR grading, BR grading, Elston-Ellis modification of Bloom Richardson score, the Nottingham modification of Bloom Richardson score, Nottingham-Tenovus, or Nottingham grade.
2. BR may be expressed in **scores** (range 3–9).
3. The score is based on three morphologic features of "invasive no-special-type" breast cancers (degree of tubule formation/histologic grade, mitotic activity, nuclear pleomorphism of tumor cells).
4. BR may be expressed as a **grade** (low, intermediate, high).
5. BR grade is derived from the BR score.

Use the table below to convert Bloom-Richardson (Nottingham) Scores; Bloom-Richardson Grade; Nuclear Grade; Terminology; and Histologic Grade to the appropriate code. (Note that the conversion of low, intermediate, and high is different from the conversion used for all other tumors)

Bloom-Richardson (Nottingham) Combined Scores	Bloom-Richardson Grade	Nuclear Grade	Terminology	Histologic Grade	Code
3 - 5 points	Low grade	1/3, 1/2	Well differentiated	I/III or 1/3	1
6, 7 points	Intermediate grade	2/3	Moderately differentiated	II/III or 2/3	2
8, 9 points	High grade	2/2, 3/3	Poorly differentiated	III/III or 3/3	3

Kidney Coding Instructions

Code grade in the following priority order:

1. Fuhrman grade
2. Nuclear grade
3. Terminology (well diff, mod diff)
4. Histologic grade (grade 1, grade 2)

These prioritization rules do not apply to Wilms tumor (8960). Use the general rules for coding grade for Wilms tumor.

Prostate Coding Instructions

Code grade in the following priority order:

1. Gleason grade (Use the table to convert Gleason grade information into the appropriate code)
2. Terminology: Differentiation (well differentiated, moderately differentiated, etc.)
3. Histologic grade: Grade 1/I/i, grade 2/II/ii, grade 3/III/iii, grade 4/IV/iv
4. Nuclear grade only

Gleason Pattern

Prostate cancers are commonly graded using the Gleason score or pattern. Gleason grading is based on five well-defined histologic patterns. The pathologist will evaluate the tissue to determine the primary (majority) and secondary (background) patterns for the tumor. The pattern is written with the majority pattern appearing first and the secondary pattern as the last number.

Example:
A Gleason pattern of 2 + 4 means that the primary pattern is 2 and the secondary pattern is 4.

Gleason Score

The patterns are added together to create a score.

Notes:

a. *If the pattern is 2 + 4, the pattern score is 6 (the sum of 2 and 4).*

b. *If the pathology report contains only **one number**, and that number is **less than or equal to 5,** it is a pattern.*

c. *If the pathology report contains only **one number**, and that number is **greater than 5**, it is a score.*

d. *If the pathology report specifies a specific **number out of a total of 10**, the first number given is the score.*

Examples:

a. The pathology report says "Gleason's 3/10." The Gleason score would be 3.

***Note:** If there are **two numbers other than 10**, assume they refer to two patterns. The first number is the primary pattern and the second is the secondary pattern.*

b. The pathology report says "Gleason's 3 + 5." The Gleason's score is 8, the sum of 3 and 5.

Use the table below to convert Gleason's pattern or score into the ICD-O-3 morphology 6th digit codes.

Gleason Conversion Table

GLEASON SCORE	GLEASON PATTERN	HISTOLOGIC GRADE	TERMINOLOGY	ICD-O-3 MORPHOLOGY 6TH DIGIT CODE
2, 3, 4	1, 2	I	Well differentiated	1
5, 6	3	II	Moderately differentiated	2
7, 8, 9, 10	4, 5	III	Poorly differentiated	3

***Note:** Gleason score 7 was previously coded to moderately differentiated (2). Effective with cases diagnosed 1/1/2003, Gleason's score 7 is coded to poorly differentiated (3).*

Astrocytoma Coding Instructions

Grade astrocytomas according to ICD-O-3 rules.

MORPHOLOGY TERM	GRADE
Astrocytoma, anaplastic	4
Astrocytoma, low grade	2

1. Do not use the **WHO grade** to code this field.

2. Do not automatically code **glioblastoma multiforme** as grade IV. If no grade is given, code unknown, 9.

3. If **no grade** is given, code unknown, 9.

Lymphoma and Leukemia Coding Instructions:

1. Do not use the terms "high grade", "low grade", and "intermediate grade" to code differentiation. These terms refer to Working Formulation categories, not grade.

2. The designation of T-cell, B-cell, null cell, or NK cell phenotype has **precedence** over any statement of differentiation.

   a. Code ANY statement of **T-cell**, **B-cell**, **null cell**, or **NK cell.**

   b. Use any source in the patient record to code information on cell type whether or not marker studies are documented. Do not code the phenotype from the ICD-O-3 numeric list headings.

Lymphoma and Leukemia Grade

T-CELL (CODE 5)	B-CELL (CODE 6)	NULL-CELL (CODE 7)	NATURAL KILLER CELL (CODE 8)	UNKNOWN CELL TYPE (CODE 9)
Cortical T	B-cell phenotype	Null-Cell	N/K cell	Combined B and T cell
Mature T	B-precursor	Non-T-non-B	NK/T cell	
Pre-T	Pre-B	Common cell		
Pro-T	Pre-pre-B			
T-cell phenotype	Pro-B			
T-precursor				

Example:
The history portion of the medical record documents that the patient has a T-cell lymphoma. There are no marker studies on the chart. *Code the grade as T-cell.*

Sarcoma Coding Instructions

If sarcomas are graded low, intermediate or high grade by the pathologist use the three-grade system table.

LATERALITY (NAACCR Item #410) (FORDS pg. 92; SEER pgs. 73-75)

Description
Identifies the side of a paired organ or the side of the body where the tumor originated.

Explanation
Aids in staging and extent of disease information, and may indicate the number of primaries.

Coding Instructions

1. Starting with cases diagnosed January 1, 2004 and later, laterality is coded for specified invasive, benign, and borderline primary intracranial and CNS tumors. See Paired Organ Sites Table beginning on page 94.

2. Non-paired sites are coded to 0.

3. Unknown (C809) and Ill-defined (C760–C768) sites are coded to 0.

4. Assign code 9 when there is a midline tumor or when the disease originated in a paired site, but the laterality is unknown.

Examples:
a. Admitting history says patient was diagnosed with lung cancer based on positive sputum cytology. Patient is treated for painful bony metastases. There is no information about laterality in the diagnosis of this lung cancer. Assign code 9.

b. Patient has an excision of a melanoma located just above the umbilicus. Assign code 9 for a midline tumor.

5. **Do not** code metastatic sites as bilateral involvement.

Example:
Patient is diagnosed with adenocarcinoma of the left lung and the physician states patient has metastasis to the right lung. Assign laterality code 2, left origin of primary.

6. For primaries of in situ behavior, if laterality is not known, code to 3 (only one side involved, right or left origin of primary not indicated). Laterality for in situ behavior cannot be coded to 9 or 4.

7. Assign code 3 if laterality is unknown but the tumor is confined to a single side of a paired organ.

Example:
Pathology report: Patient has a 2 cm carcinoma in the upper pole of the kidney. Code

laterality as 3 because there is documentation that the disease exists in only one kidney, but it is unknown if the disease originated in the right or left kidney.

NOTE: *Code laterality to 9 if stage is no longer localized.*

CODES	DESCRIPTION
0	Not a paired site
1	Right origin of primary
2	Left origin of primary
3	Only one side involved, right or left origin of primary not indicated
4	Bilateral involvement; side of origin unknown; stated to be a single primary includes: • Both ovaries simultaneously involved with a single histology • Bilateral retinoblastoma • Bilateral Wilms' tumors
9	Unknown site; paired site, lateral origin unknown; midline tumor

BILATERAL SITES

- Laterality must be recorded for the following bilateral sites. Only major headings are listed. Laterality should be recorded for all anatomic sub-sites included in *ICD-O-3* unless specifically excluded. Such exclusions are coded 0.

- Code laterality using codes 1–4 or 9 for all of the sites listed in the following table:

PAIRED ORGAN SITES - ALPHABETICAL ORDER	
PRIMARY SITE	**ICD-O-3 CODES**
Acoustic nerve	C724
Adrenal gland [cortex, medulla]	C740–C749
Breast	C500–C509
Carotid body	C754
Cerebral meninges, NOS	C700
Cerebrum	C710
Conjunctiva, lacrimal gland, orbit, cornea, retina, choroid, ciliary body, iris, sclera, lens, eyeball	C690
Connective, subcutaneous and other soft tissues of lower limb & hip	C492
Connective, subcutaneous and other soft tissue of upper limb & shoulder	C491
Cranial nerve, NOS	C725
Epididymis	C630
Fallopian tube	C570

PAIRED ORGAN SITES - ALPHABETICAL ORDER	
PRIMARY SITE	**ICD-O-3 CODES**
Frontal lobe	C711
Frontal sinus	C312
Kidney, NOS	C649
Long bones of upper limb, scapula and associated joints	C400
Long bones of lower limb and associated joints	C402
Lung	C341–C349
Main bronchus [excluding carina]	C340
Maxillary sinus [antrum]	C310
Middle ear [tympanic cavity]	C301
Nasal cavity [excluding nasal cartilage and nasal septum code 0]	C300
Occipital lobe	C714
Olfactory nerve	C722
Optic nerve	C723
Ovary	C569
Overlapping lesion of the eye and adnexa; Eye, NOS; Eye and lacrimal Gland	C690–C699
Parietal lobe	C713
Parotid gland	C079
Pelvic Bones and associated joints [excluding sacrum, coccyx and symphysis pubis - code 0]	C414
Peripheral nerves and autonomic nervous system of lower limb and Hip	C472
Peripheral nerves and autonomic nervous system of upper limb and shoulder	C471
Pleura	C384
Renal pelvis	C659
Rib, clavicle, and associated joints [excluding sternum - code 0]	C413
Short bones of upper limb and associated joints	C401
Short bones of lower limb and associated joints	C403
Skin of external ear	C442
Skin of eyelid	C441
Skin of other and unspecified parts of face [midline code 9]	C443
Skin of upper limb and shoulder	C446
Skin of lower limb and hip	C447
Skin of trunk [midline code 9]	C445
Spermatic cord	C631
Sublingual gland	C081

PAIRED ORGAN SITES - ALPHABETICAL ORDER	
PRIMARY SITE	**ICD-O-3 CODES**
Submandibular gland	C080
Temporal lobe	C712
Testis	C620–C629
Tonsil, NOS and Overlapping lesion of Tonsil	C098–C099
Tonsillar fossa	C090
Tonsillar pillar	C091
Ureter	C669

PAIRED ORGAN SITES - NUMERICAL ORDER	
ICD-O-3	**PRIMARY SITE**
C079	Parotid gland
C080	Submandibular gland
C081	Sublingual gland
C090	Tonsillar fossa
C091	Tonsillar pillar
C098	Overlapping lesion of tonsil
C099	Tonsil, NOS
C300	Nasal cavity [excluding nasal cartilage and nasal septum code 0]
C301	Middle ear [tympanic cavity]
C310	Maxillary sinus [antrum]
C312	Frontal sinus
C340	Main bronchus [excluding carina]
C341–C349	Lung
C384	Pleura
C400	Long bones of upper limb, scapula, and associated joints
C401	Short bones of upper limb and associated joints
C402	Long bones of lower limb and associated joints
C403	Short bones of lower limb and associated joints
C413	Rib and clavicle [excluding sternum code 0]
C414	Pelvic bones [excluding sacrum, coccyx, and symphysis pubis code 0]
C441	Skin of eyelid
C442	Skin of external ear
C443	Skin of other and unspecified parts of face [midline code 9]
C445	Skin of trunk [midline code 9]
C446	Skin of upper limb and shoulder

PAIRED ORGAN SITES - NUMERICAL ORDER	
ICD-O-3	**PRIMARY SITE**
C447	Skin of lower limb and hip
C471	Peripheral nerves and autonomic nervous system of upper limb and shoulder
C472	Peripheral nerves and autonomic nervous system of lower limb and hip
C491	Connective, subcutaneous, and other soft tissues of upper limb and shoulder
C492	Connective, subcutaneous, and other soft tissues of lower limb and hip
C500–C509	Breast
C569	Ovary
C570	Fallopian tube
C620–C629	Testis
C630	Epididymis
C631	Spermatic cord
C649	Kidney, NOS
C659	Renal pelvis
C669	Ureter
C690–C699	Eye and adnexa
C700	Cerebral meninges , NOS
C710	Cerebrum [effective with cases diagnosed 01/01/2004]
C711	Frontal lobe [effective with cases diagnosed 01/01/2004]
C712	Temporal lobe [effective with cases diagnosed 01/01/2004]
C713	Parietal lobe [effective with cases diagnosed 01/01/2004]
C714	Occipital lobe [effective with cases diagnosed 01/01/2004]
C722	Olfactory nerve [effective with cases diagnosed 01/01/2004]
C723	Optic nerve [effective with cases diagnosed 01/01/2004]
C724	Acoustic nerve [effective with cases diagnosed 01/01/2004]
C725	Cranial nerve, NOS [effective with cases diagnosed 01/01/2004]
C740–C749	Adrenal gland [cortex, medulla]
C754	Carotid body

Notes:

a. *A laterality code of 1–4 or 9* ***must*** *be assigned for the above sites except as noted. If the site is not listed on the table, assign code 0 for laterality.*

b. *All primary brain and CNS tumors diagnosed* ***prior to 2004*** *are coded laterality 0, Not a paired site.*

c. *Never use code 4 for bilateral primaries for which separate abstracts are prepared, or when the side of origin is* ***known*** *and the tumor has spread to the other side. Code 4 is*

seldom used EXCEPT for the following diseases:

i. Both ovaries involved simultaneously, single histology
ii. Bilateral retinoblastoma
iii. Bilateral Wilms tumors

Example:
A left breast primary with metastasis to the right breast is coded to 2 (left). This would **not** be coded to 4 (bilateral).

Note: *Sometimes the physician may describe the site of the tumor in an organ as right or left. This is a descriptive term and does not refer to a bilateral site or organ.*

Example:
Patient admitted for surgical resection of tumor in right colon. Code to 0, Not a paired site. Do not code to 1. Right colon refers to the ascending colon. The colon is not a paired site.

FINAL DIAGNOSIS – MORPHOLOGY/BEHAVIOR, GRADE, PRIMARY SITE, AND LATERALITY DOCUMENTATION (NAACCR ITEMS #2580, 2590)

Text to support morphology/behavior, grade, primary site, and laterality codes **must** be provided.

Documenting Instructions

1. Record the morphology/behavior, grade, primary site, and laterality descriptions.

2. Do not use the generic ICD-9-CM code statement found on the face/attestation sheet.

Examples:

a. **Morphology:** Moderately well differentiated mucin-producing adenocarcinoma
Primary Site: Colon, ascending

b. **Morphology:** Grade 3, infiltrating ductal and lobular carcinoma
Primary Site: Right breast, upper outer quadrant

c. **Morphology:** Anaplastic astrocytoma
Primary Site: Brain, temporal-parietal lobe

d. **Morphology:** Intermediate grade large cell carcinoma
Primary Site: Left lung lower lobe

DIAGNOSTIC CONFIRMATION (NAACCR ITEM #490) (FORDS pg. 99; SEER pgs. 76–77)

Description
Indicates the most accurate diagnostic method of the reportable tumor being reported at any time in the patient's lifetime.

Explanation
This field does not have a time restriction. It is the best method of confirmation at any time during the entire course of the disease. This field is used to calculate the percentage of microscopically confirmed cancers.

Coding Instructions

1. The codes are in **priority order**; code 1 has the highest priority. Always code the procedure with the lower numeric value when presence of cancer is confirmed with multiple diagnostic methods.

2. Change to a lower code if at ANY TIME during the course of disease the patient has a diagnostic confirmation that has a higher priority.

3. If diagnosed elsewhere, copies of the previous pathology or radiology reports included in the medical record may be used to code this field.

4. All diagnostic reports in the medical record must be reviewed to determine the most definitive method used to confirm the diagnosis of cancer. This review must cover the entire medical history in regard to the primary tumor. If diagnosed prior to admission to the reporting facility, review the history section of the record to identify information regarding previous diagnostic tests and treatments.

5. If the information in the medical record indicates a biopsy or resection of the tumor has been performed, assume the diagnostic confirmation is histological.

Example:
A patient comes in for a bone scan for staging of a known prostate cancer. It is noted in the record that the patient had a prostate biopsy two weeks prior with a positive diagnosis of adenocarcinoma. Use Diagnostic Confirmation Code 1, Positive Histology.

6. Assign **code 1** when the microscopic diagnosis is based on:

    a. Tissue specimens from biopsy, frozen section, surgery, autopsy or D&C

    b. Bone marrow specimens (aspiration and biopsy)

    c. For all hematopoietic disease (leukemia, multiple myeloma, etc.) positive findings including peripheral blood smears, CBCs and WBCs.

7. Assign **code 2** when the microscopic diagnosis is based on:

    a. Examination of cells (rather than tissue) including but not limited to: sputum smears, bronchial brushings, bronchial washings, prostatic secretions, breast secretions, gastric fluid, spinal fluid, peritoneal fluid, pleural fluid, urinary sediment, cervical smears and vaginal smears.

b. Paraffin block specimens from concentrated spinal, pleural, or peritoneal fluid

8. Assign **code 4** when there is information that the diagnosis of cancer was microscopically confirmed, but the type of confirmation is unknown.

9. Assign **code 5** when the diagnosis of cancer is based on laboratory tests or marker studies along with a clinical diagnosis for that specific cancer.

Examples:

a. The presence of alpha-fetoprotein for liver cancer.

b. An abnormal electrophoretic spike for multiple myeloma or Waldenstrom macroglobulinemia.

c. If the workup for a prostate cancer patient is limited to a highly elevated PSA and the physician diagnoses and/or treats the patient based only on that PSA, code the diagnostic confirmation to 5.

10. Assign **code 6** when the diagnosis is based only on:

    a. The surgeon's operative report from a surgical exploration or endoscopy such as colonoscopy, mediastinoscopy, or peritoneoscopy and no tissue was examined.

    b. Gross autopsy findings (no tissue or cytologic confirmation).

11. Assign **code 7** when the only confirmation of malignancy was diagnostic imaging such as computerized axial tomography (CT scans), magnetic resonance imaging (MRI scans), or ultrasounds/sonography.

12. Assign **code 8** when the case was diagnosed by any clinical method not mentioned in preceding codes. The diagnostic confirmation is coded 8 when the only confirmation of disease is a physician's clinical diagnosis.

13. Assign **code 9** when it is unknown if the diagnosis was confirmed microscopically. Death certificate only cases will be assigned **code 9**.

Note: *The diagnostic code must be changed to the lower (more specific) code if a more definitive code confirms the diagnosis during the course of the disease,* ***regardless of time frame.***

Examples:

a. Mammography indicates a lesion suspicious for cancer. The diagnostic confirmation code is 7. Two weeks later a biopsy confirms infiltrating ductal carcinoma. **The correct diagnostic confirmation code is 1.**

b. MRI originally diagnosed a patient with a glioblastoma. The diagnostic confirmation code is 7. A year later a surgical biopsy is obtained. **The diagnostic confirmation code would be changed to 1.**

c. A thoracentesis is performed for a patient who is found to have a large pleural effusion. Cytology reveals malignant cells consistent with adenocarcinoma. **The diagnostic confirmation code is 2.**

d. CAT scan of abdomen reveals metastatic deposits in the liver and a large lesion in the ascending colon. Biopsy and later resection of the colon lesion revealed mucin-producing adenocarcinoma. **The diagnostic confirmation code is 1.**

e. Fine needle aspiration (FNA) is positive for malignant cells. **The diagnostic confirmation code is 2.**

EXCEPTION: *If an aspiration biopsy of bone marrow is performed for diagnosing leukemia, the diagnostic confirmation code is 1. Code the diagnostic confirmation field to 1 (positive histology) for all hematopoietic diseases diagnosed by either peripheral blood or bone marrow biopsy.*

Codes

CODE	DESCRIPTION	DEFINITION
	MICROSCOPICALLY CONFIRMED	
1	Positive histology	Histological confirmation (tissue microscopically examined). Includes positive hematological findings relative to leukemia and bone marrow specimens (including aspiration biopsies). In situ staged cases must be microscopically confirmed.
2	Positive cytology	Cytological confirmation (no tissue microscopically examined; fluid cells microscopically examined). Includes pap smears, bronchial brushings, FNA and peritoneal fluid, cervical and vaginal smears, diagnoses based on paraffin block specimens from concentrated spinal, pleural or peritoneal fluid.
4	Positive microscopic confirmation, method not indicated	Diagnosis is stated to be microscopically confirmed but the method is not specified.

NOT MICROSCOPICALLY CONFIRMED		
5	Positive laboratory test/marker study	A clinical diagnosis of cancer is based on laboratory tests/marker studies that are clinically diagnostic for cancer. This includes alpha-fetoprotein for liver cancer and abnormal electrophorectic spike for multiple myeloma. Elevated PSA is non-diagnostic of cancer. If the physician uses the PSA as a basis for diagnosing prostate cancer with no other work-up, code to 5. (Adapted from SEER).
6	Direct visualization without microscopic confirmation	The tumor was visualized during a surgical/endoscopic procedure, with no specimen for microscopic exam.
7	Radiography and other imaging techniques without microscopic confirmation	The physician diagnosed the tumor from an imaging technique only.
8	Clinical diagnosis only (other than 5, 6, or 7)	The physician documented the tumor in the medical record. ***Note:*** Refer to *Ambiguous Terminology List*. For cases diagnosed on or after 1/1/2007, refer to Appendix O.
CONFIRMATION UNKNOWN		
9	Unknown whether or not microscopically confirmed	There is a statement of tumor in the medical record, but there is no indication of how it was diagnosed. Includes death certificate only cases.

TUMOR SIZE (NAACCR ITEM #780) (FORDS pgs. 100–101; SEER EOD pgs. 3–6)

Note:
This data field is coded only for cases diagnosed prior to 2004. See the *TCR Cancer Reporting Handbook, Revised 2007* for coding instructions.

Note:
For cases diagnosed January 1, 2004 and later see Appendix A for instructions for coding CS Tumor Size (NAACCR Item # 2800) (CS MANUAL Version 01.04.00 pg. I-25)

REGIONAL LYMPH NODES POSITIVE (NAACCR ITEM #820) (FORDS pg. 103; SEER pg. 145, CS MANUAL pg. I-45)

Note: *The instructions for this data item have been moved to Appendix A, page A-24.*

Note: *The table can also be found in the Quick Reference, Standard Tables Section.*

REGIONAL LYMPH NODES EXAMINED (NAACCR Item #830) (FORDS pg. 102; SEER pgs. 146, CS MANUAL pg. I-46)

NOTE: *The instructions for this data item have been moved to Appendix A, page A-26*

NOTE: *The table can also be found in the Quick Reference, Standard Tables Section.*